

ExxonMobil™ LDPE LD 117 Series

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 117 are homopolymer film resins with good clarity and excellent stiffness. Film made from LD 117 resins can be used in overwrap applications and in push-through type packaging equipment. With a narrow die gap, film produced from LD 117 resins can be drawn down to 1.0 mil gauge.

General

Additive	- LD 117.85: Antiblock: 1000 ppm; Slip: 250 ppm; Thermal Stabilizer: Yes - LD 117.NM: Antiblock: No; Slip: No; Thermal Stabilizer: Yes - LD 117.JJ: Antiblock: 1000 ppm; Slip: 250 ppm; Thermal Stabilizer: Yes - LD 117.03: Antiblock: No; Slip: No; Thermal Stabilizer: Yes		
Applications	- Bread Bags - Co-Extrusion Films - Collation Shrink - Diaper Backsheet	- Foams - High Performance Collation Shrink - Hygiene Packaging - Label Film	- Lamination Film - Overwrap Film - Paper Overwrap

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.929 g/cm ³	0.929 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.6 g/10 min	1.6 g/10 min	ASTM D1238
Peak Melting Temperature	241 °F	116 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	219 °F	104 °C	ASTM D1525

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	2000 psi	14 MPa	ASTM D882
Tensile Strength at Yield TD	2300 psi	16 MPa	ASTM D882
Tensile Strength at Break MD	3600 psi	25 MPa	ASTM D882
Tensile Strength at Break TD	2600 psi	18 MPa	ASTM D882
Elongation at Break MD	170 %	170 %	ASTM D882
Elongation at Break TD	510 %	510 %	ASTM D882
Secant Modulus MD - 1% Secant	46000 psi	320 MPa	ASTM D882
Secant Modulus TD - 1% Secant	54000 psi	380 MPa	ASTM D882
Dart Drop Impact	80 g	80 g	ASTM D1709A
Elmendorf Tear Strength MD	190 g	190 g	ASTM D1922
Elmendorf Tear Strength TD	240 g	240 g	ASTM D1922
Puncture Force	7 lbf	31 N	ExxonMobil Method
Puncture Energy	3.0 in-lb	0.34 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	68	68	ASTM D2457
Haze	7.1 %	7.1 %	ASTM D1003

Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

Processing Statement

Film (1.5 mil/38.1 micron) made from LD 117.85 resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 350-370°F (177-188°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).